#### **TECHNICAL SPECIFICATIONS**

#### 1. SURFACE TREATMENT

The Jefferson County Highway Department intends to provide surface treatment on County roads for the purpose of sealing existing pavements, to protect subbase materials and/or to provide a wearing surface for those courses. Vendors are requested to provide bids for liquid bituminous sealing grades, furnished and applied.

All surface treatment will be provided in accordance with the most recent NYSDoT Standard Specifications for Construction and Material and subsequent addenda, as modified herein. Payment for requested services or materials shall be made in Customary US Units.

<u>Section 410</u> - All provisions apply. Test patch provisions will be monitored by a designated representative of the Department.

<u>Section 702</u> - Bituminous Materials. All provisions that apply to the manufacture, handling and transport of liquid asphalts and asphalt emulsions must be strictly enforced. Transports, storage tanks and distributors must meet NYSDoT specifications. Suppliers must be approved NYSDoT suppliers. Material must be manufactured at a facility on the NYSDoT Approved List of Liquid Bituminous Material Primary Sources.

Jefferson County may utilize NYSDoT approved liquid items for surface treatment, either anionic or cationic. It will be the Contractor's responsibility to insure compatibility between the liquid asphalt and the aggregate to be used. The acceptance of the bituminous material will be based on the name of the primary source on the NYSDoT Approved List and contingent upon satisfactory test results from samples taken at the location where the material is incorporated into the work.

Non-DOT items must be as identified (or demonstrated equal) on the bid form and are subject to the approval of the County Highway Superintendent based upon the bidder's demonstration of the general acceptance of these items within New York State for surface treatments. The bidder must show that the proposed alternative items have been successfully employed in at least 5 projects comprising 12,000 square yards each. The bidder will submit with the qualifications form, evidence of five years experience utilizing these non-NYSDoT items as certified by the supplier, unless previously documented or demonstrated. This certification must be in writing.

All aggregates incorporated into the work must be in conformance with NYSDoT Standard Specifications. All aggregates, regardless of supplier, will be tested by the contractor to confirm suitability and compatibility with the liquid asphalt.

#### 2. COLD MIX BITUMINOUS PAVEMENT

The Jefferson County Highway Department intends to provide dense graded and open graded cold mix asphalt for surfacing County Roads. Vendors are requested to provide bids to supply and pug liquid asphalts suitable for mixing with aggregate blends to produce the desired pavement items. Typical applications are binder courses over new subbase and top courses over existing pavements.

All cold mixes shall be provided in accordance with the most recent NYSDoT Standard Specifications for Construction and Materials and subsequent addenda, as modified herein.

The produced mixtures shall not exhibit an excessive amount of asphalt emulsion or water run-off during production, hauling or placing. The mixtures shall have sufficient workability to be placed using normal methods without screed or roller marks. The mixed material shall be able to be compacted and opened to traffic within two (2) hours of placement without rutting or picking. If the placed mixture is not satisfactory to the Department's representative, the Contractor shall cease production and remedy same immediately. If the Contractor cannot exhibit an ability to produce a satisfactory mix, the Superintendent reserves the right to deploy appropriate resources to complete the project requirements. The low bidder will be charged the loss of the County's equipment time and the differential in price between his bid and the second bidder.

<u>Section 702</u> - Bituminous Materials. All provisions that apply to the manufacture, handling and transport of liquid asphalts and asphalt emulsions must be strictly enforced. Transports, storage tanks and distributors must meet NYSDoT specifications. Suppliers must be approved NYSDoT suppliers. Material must be manufactured at a facility on the NYSDoT Approved List of Liquid Bituminous Material Primary Sources.

Jefferson County may utilize NYSDoT approved liquid items for Cold Mix Bituminous items, either anionic or cationic. It will be the Contractor's responsibility to insure compatibility between the liquid asphalt and the aggregate to be used. The acceptance of the bituminous material will be based on the name of the primary source on the NYSDoT Approved List and contingent upon satisfactory test results from samples taken at the location where the material is incorporated into the work.

Non-DOT items must be as identified (or demonstrated equal) on the bid form and are subject to the approval of the County Highway Superintendent based upon the bidder's demonstration of the general acceptance of these items within New York State for similar cold mix pavements. The bidder must show that the proposed alternative items have been successfully employed in at least 5 projects comprising 2,100 tons each. The bidder shall submit with the qualifications form, evidence of five years experience utilizing these non-NYSDOT items as certified by the supplier unless previously documented or demonstrated. This certification must be in writing. (See also: 3. General Provisions.)

All aggregates incorporated into the work must be in conformance with NYSDoT Standard Specifications. All aggregates, regardless of supplier, will be tested by the contractor to confirm suitability and compatibility with the liquid asphalt.

#### 3. GENERAL PROVISIONS

Technical Submittal within 10 Days of Bid Opening Unless Previously Documented or Demonstrated

- a. Supplier for liquid asphalt, location of manufacturing facility & laboratory, with evidence of NYSDoT approval
- b. Contractors evidence of NYSDoT certification to work in NY State as a liquid asphalt application contractor.
- c. References from previous work
- d. Statement certifying 5 yrs experience with non-NYSDoT liquids, unless previously documented or demonstrated.
- e. Name(s) of technical personnel and qualifications

<u>Pre-Construction Conference</u>: For all In-Place projects, a preconstruction conference shall be held at least five days prior to site work to discuss mix designs, application procedures, maintenance and protection of traffic, public notification, and other operational issues.

The Contractor will submit a written proposal outlining mixing and application methods and equipment; bituminous liquids; aggregate sizes; certification of compatibility; and spread rates proposed to be used. Approval by the County Highway Superintendent does not relieve the Contractor of any responsibility for the performance of the project. The proposal, as modified, shall become an attachment to the Purchase Order issued through the County Purchasing Agent.

Each transport load of liquid bituminous material shall be accompanied by a certification attesting to conformance with the provisions of the applicable FHWA, USDoT, ANSI, ASTM, or NYSDoT specifications, as modified herein, sampled and tested by the Manufacturer at a certified testing lab. All sampling, testing, inspection, certification and shipping shall be in accordance with Materials Method applicable standards. Each truck or distributor shall be properly equipped with a sampling device. Should materials furnished not conform with these specifications or are deemed unsatisfactory by the Department, payment due will be withheld and the Contractor shall be held responsible for any damage involved.

Each load of liquid bituminous material delivered shall have a printed, numbered delivery ticket meeting specifications showing date, road name or project, gallons, temperature, application rate, and grade of product. Each ticket must be signed by Vendor's driver and the Superintendent of Highways or his representative.

The supplier shall provide the Department with certified copies of test results of all asphalt emulsion shipments incorporated into Departmental work. The supplier shall provide the Department with certified copies of test results of each aggregate stockpile, and extraction results of mixes on a daily basis.

In addition, the Department, at the discretion of the Superintendent or his designee, may have samples tested by an independent, certified testing lab. The Superintendent of Highways shall determine who will deliver samples to the testing laboratory. Failure to comply with the provisions of the appropriate specifications (NYSDoT, ASTM, etc.) may be grounds for rejection of the work, non-payment for the delivered materials, and for backcharging the Contractor for the tests. In any case, payment by the Department for materials incorporated into the work shall not be construed as acceptance thereof.

All materials shall be delivered under the direction and supervision of the County Superintendent of Highways or authorized designated representative.

The Department's representative will make necessary field measurements to ascertain quantities actually delivered or applied. These measurements will be made prior to commencing and upon completion. Transports and distributors shall be equipped with approved NYSDoT meters and with a calibrated tank stick gauge. Supplier's driver will provide access to tanks by opening the dome to permit confirming measurement by County's authorized representative.

The Contractor is required to satisfactorily schedule with the Department each project. Failure by the Contractor to schedule the work to the satisfaction of the County within this time frame shall be deemed a declaration on the part of the Contractor that he does not intend to perform and the County may then secure the materials or services elsewhere. The contractor will reimburse the County for any differential in charges between their bid and the acceptable supplier for the materials or services.

For materials designated "Furnished and Applied", the materials will be furnished, delivered, heated, and applied on roads in the County of Jefferson as designated.

#### **GUARANTEE**

#### PERFORMANCE WARRANTY

The Contractor attests to the following warranty upon completion of the work and acceptance of final payment:

The Contractor hereby warrants that all workmanship and all materials furnished under this item shall comply fully with the requirements of these specifications. If at any time within two years after the date of the completion of the work, any unfaithful or defective work should appear, which in the opinion of the Superintendent is due to inferior materials or workmanship, the Contractor shall have thirty (30) days, after receiving written notification from the Superintendent, to correct, repair or replace the defective or inferior materials and / or workmanship at his or her expense to the satisfaction of the Superintendent. The guarantee shall be automatically extended to two years from the completion of any corrections, repairs or replacements of defective materials. The cost of inspections, samplings, or tests that reveal defective, inferior or inadequate materials or workmanship and any subsequent inspections, sampling or tests shall be paid by the Contractor.

# 4. EQUIPMENT

All equipment used by the bidder for the fulfillment of this contract shall be modern equipment and in proper repair and sufficiently well maintain to produce satisfactory work. The equipment to be used may be inspected by the County Highway Superintendent before this bid will be awarded.

All emulsion distributors shall meet current NYSDoT Specifications. Sufficient distributors and transports shall be provided to ensure continuous operation and minimize idle time.

The equipment used for Pug-mill mixing or mixing in place will be of modern design and conform to current NYSDoT Specifications. The traveling pugmill or mix plant to be used on any project will be available for inspection prior to commencing work. Mixing equipment shall meet NYSDoT specifications for equipment for Cold Mix Bituminous Pavement. The pugmill for cold bituminous mixes shall be capable of producing at least 4.5 tons per minute for various graded mixtures. Additionally, when mixing more than two aggregates, the aggregate feed system must contain a minimum of two (2) compartments or bins; each compartment or bin shall have adjustable feed gates so that aggregates can be proportioned at the specified rate. The capacities of the cold feed bins shall be sufficient to maintain a continuous flow of material. Each bin shall have a mechanical device for uniform feeding of the aggregate. The mixer unit shall be approved by the Department prior to commencing any work. Mixing or blending of cold mix aggregates must be done through the pugmill, not within a stockpile.

The aggregate spreader shall be a self-propelled unit capable of uniformly spreading the aggregate at a rate specified by the Highway Superintendent with an allowable variation not to exceed 0.5 pounds per square yard. The spreader hopper shall be variable width having a minimum spread width of 8 feet up to 20 feet with gate openings graduated so that the spread widths can be adjusted in 6 inch increments. The spreader shall be equipped with a self-locking hitch with a minimum of 90 degree vertical movement. The machine shall have sufficient power and traction to pull loaded aggregate truck on any County road and supplied with one operator.

Compaction equipment and its operation shall be in compliance with NYSDoT Specifications for Rollers and Compaction and shall be of a size and number to satisfactorily complete the work as specified by the Superintendent of Highways.

The bituminous paver shall be equipped with automatic transverse slope and longitudinal grade screed controls and two operators. The paver shall be equipped with a screed that is fully extendible from 10 feet to 19 feet 6 inches. Heat and vibration shall be provided for the full extended width. The extensions shall have independent slope control and on the go capabilities to change width and slope.

## 5. BASIS OF PAYMENT

# 1. LIQUID SEALING GRADES

**a. Liquid, Furnished and Applied:** The price bid per gallon shall include the cost of all labor, materials, equipment and supplies necessary to apply specified liquid bituminous materials through an approved distributor at locations within the County. Equipment to be bid separately.

#### 2. LIQUIDS - MIXING GRADES

**a. Liquid and Delivered:** The unit price per gallon will only be paid on the quantity delivered. The price per gallon shall include the cost of all labor, materials, equipment and supplies necessary to deliver Liquid Bituminous materials. The price bid shall be exclusive of aggregate costs. Equipment to be bid separately.

### 3. COLD MIXES

All cold mixes to be priced per ton FOB at the site of portable plant or travel plant.

# 6. METHOD OF MEASUREMENT

Payment shall be made at the contract price per gallon for the actual quantity of Bituminous Material incorporated into the work. For the purpose of measurement, a gallon shall be the volume of 231 cubic inches, and measurement shall be based on the volume of Bituminous Material at a temperature of 60 degrees Fahrenheit. Payment for items by the square yard will be measured for the area actually covered in accordance with the written Purchase Order. The Asphalt Price Adjustment procedure for liquid products is provided within this specification.

In-Place Surface Treatment will be measured for the area actually covered in accordance with the written Purchase Order.

# SPECIFICATIONS FOR EMULSIFIED ASPHALT HFRS-2 P (Polymer Modified)

The emulsion is a High Float, Polymer Modified, rapid setting emulsion. It shall be homogeneous and shall conform to the following requirements:

# Properties (a)

	<u>Min</u>	<u>Max</u>
Viscosity, Saybolt Furol @ 122°F (50C), sec	100	400
Storage Stability, 24 hour, %		1.0
Demulsibility, 0.02 N CaC12, %	60	
Sieve Test, %		0.10
Polymer, Wt. %	2	
<u>Distillation</u> (b)		
Oil Distillate, by volume of emulsion, %		3
Residue from distillation, %	63	
Tests on Residue from Distillation:		
Penetration, 77° F (25C) 100g, 5 sec	100	200
Ductility, 39.2° F (4C) 5cm/minute, cm.	50	
Float Test @ 140° F (60C), sec	1200	
Solubility in Trichloroethylene, %	97.5	
Viscosity @ 140° F, @ sec-1, Poise (c)	1500	

- (a) All tests shall be run in accordance with ASTM D-244 except as noted.
- (b) ASTM D-244 except that the maximum temperature that the material shall be subjected to is  $383^{\circ} F + 10^{\circ} F$ .
- (c) ASTM Method D-4957

The emulsion shall remain homogenous and useable for a minimum of 30 days. The supplier will not be held responsible for emulsion test of samples that have frozen before testing.

The polymer shall be added at the time of manufacture of the emulsion.

Material that does not fully comply with these specifications will be rejected. The supplier shall be responsible for the cost and disposal of rejected material.

If the low bidder is unable to supply material as specified when ordered, the County reserves the right to order material from the next bidder and bill the low bidder any additional incurred costs.

# **Price Adjustments:**

Total % Asphalt Plus Fuel:

The % of total allowable asphalt and fuel for each item is as follows:

		Petroleum	Total Allowable
<u>Grade</u>	<u>%Asphalt</u>	<u>Allowance</u>	<u>Petroleum</u>
HFRS-2	63%	2.7	65.7%
HFMS-2	65%	8.2	73.2%
HFMS-2ST	65%	8.2	73.2%
HFMS-2H	65%	2.7	67.7%
CRS-1	60%	2.7	62.7%
CRS-2	65%	2.7	67.7%
CRS-2P	65%	3.2	67.7%
CMS-2	65%	10.2	75.2%
CMS-2H	65%	10.2	75.2%
HFRS-2P	63%	2.7	65 <b>.</b> 7%
Tack Coat	40%	0.2	40.2%
AEDC	40%	4.2	44.2%
RA-5	95%	0.2	95.2%
RA-25	56%	0.2	56.2%
HFMS-2C	68%	5.2	73.2%
HFRA	60%	10.2	70.2%
HFMS-2GWS	68%	7.2	75.2%
HFMS-2GH	70%	10.2	80.2%

Example:

Base Ave. Price - \$387.000 New Ave. Price - \$397.00 Total % Asphalt plus Fuel - 75%

\$<u>397.00 - \$387.00</u> x 0.75 = +.032 per gallon

235

Base Ave. FOB Terminal Date: 11/1/22

Base Ave. FOB Terminal Price: \$690.00 US Ton

COMPANY NAME:

				Page 1 of 2
			<b>Liquid,</b> Furnished & Applied	
1.	Emulsions	<b>i</b>		
A.	Sealing G	rades	Price per Gallon	
		HFMS-2ST		
		HFMS-2STP		
		CRS-2		
		CRS-2P	<u></u>	
		HFMS-2H		
		HFRS-2		
		Tack Coat**		
		HFRS-2P		
		AEDC		
**	Minimum 30	oo gal. waiting time afte	r 1 hour	
			Liquid (Delivered)	
В.	Mixing Gr	rades	Price per Gallon	
702	2-4201	CMS-2		
	2-4301	CMS-2h		
	2-3401	HFMS-2h		
	2-3301	HFMS-2		
		HFMS-2C		
		HFMS-2Gh		
		HFRA		

HFMS-2Gws

	COMPANY NAME:			
				Page 2 of 2
2.	Equipment			
		Day	Per Hour Over 10 hours	
Auton	nated Chipper			
Pneun	natic Roller			
Pugmi	II			
Auton	nated Paver			
Vibrat	ory Roller			
Mobili	zation - To be included in above pric	ing		
3.	59W Bituminous Stabilized Mix (FOB Plant)			

Attached Bid Checklist, Signature/Non Collusive Page, and Iran Notice must be signed to complete the bid.

#### **BID CHECKLIST**

The documents required to complete this bid are indicated below.

**5** 11 11

(X)	Performance Bond in the amount of	<u>\$ 300,000.00</u>
(X)	Insurance Certificates	See Exhibit A, pages F-G
(X)	Iran Notice	See Pages 3l – 3m
	We have reviewed and submitted the items requ	uired under the Mandatory Submission Requirements.
	The Bid Page(s), Signature/Non-Collusive Page, 8	& Iran Notice are completed and included.
	Deviations are noted and explained.	
	Insurance Certificates are enclosed if required.	

# WAIVER OF IMMUNITY/NON-COLLUSIVE BIDDING CERTIFICATE PURSUANT TO SECTION 103-D OF THE NEW YORK STATE GENERAL MUNICIPAL LAW

- A. By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid, each party thereto certifies as to its own organizations, under penalty of perjury, that to the best of knowledge and belief:
  - 1. The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor.
  - 2. Unless otherwise required by law, the prices which have been quoted in this bid have not knowingly been disclosed by the bidder and will not knowingly be disclosed by the bidder, directly or indirectly, prior to opening, to any bidder or to any competitor.
  - 3. No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

A bid shall not be considered for award nor shall any award be made where 1,2, and 3 above have not been complied with; provided, however, that in any case the bidder cannot make to foregoing certification, the bidder shall so state and shall furnish with the bid a signed statement which sets forth in detail the reasons thereof. Where 1,2, and 3 above have not been complied with, the bid shall not be considered for any award nor shall any award be made unless the head of the Purchasing Unit to the political subdivision, public department, agency or official thereof to which the bid is made, or his designee, determines that such disclosure was not made for the purpose of restricting competition.

The fact that a bidder (a) has published price lists, rates, or tariffs covering items being procured, (b) has informed prospective customer of proposed or pending publications of new or revised price lists for such items, or (c) has sold the same items to other customers at the same prices being bid, does not constitute, without more, a disclosure within the meaning of paragraph "A" above.

B. Any bid hereafter made to any political subdivision of the state or any public department, agency or official thereof by a corporate bidder for work or services performed or to be performed or goods sold or to be sold, where competitive bidding is required by statute, rule, regulation, local law, and where such bid contains the certification referred to in paragraph "A" of this section, shall be deemed to have been authorized by the Board of Directors of the bidder, and such authorization shall be deemed to include the submission of the bid and the inclusion therein of the certificate as to non-collusion as the act and deed of the corporation.

# SIGNATURE/NON-COLLUSIVE PAGE

The undersigned proposes to furnish products or services to specifications included in this bid document, at the price(s) set forth, as required to meet the County's needs. Any deviation to the specifications must be noted on the bid form and fully explained or the deviations will not be considered part of the bid.

	ge and additional documents as specified on the bid checklist. Bidder hereby pertaining to this bid which are made part of the original bid specifications.
	COMPANY NAME
	ADDRESS (Principal Office)
	CITY, STATE, ZIP CODE
	AREA CODE/TELEPHONE NUMBER
	FAX NUMBER
	AUTHORIZED SIGNATURE
	PRINTED NAME
	TITLE
	DATE
	ADDRESS (Local Office)
	CITY, STATE, ZIP CODE
	AREA CODE/TELEPHONE NUMBER
	FAX NUMBER
	E-MAIL ADDRESS
Check One: Corporation	Partnership Individual
Federal Identification #	
Incorporated under the laws of the S	tate of
State if authorized to do business in t	he State of New York: Yes No
Names/Addresses of Partners:	

# **Iranian Energy Sector Divestment**

Contractor hereby represents that said Contractor is in compliance with New York State General Municipal Law Section 103-g entitled "Iranian Energy Sector Divestment", in that said Contractor has not:

- a. Provided goods and services of \$20 Million or more in the energy sector of Iran including but not limited to the provision of oil or liquefied natural gas tankers or products used to construct or maintain pipelines used to transport oil or liquefied natural gas for the energy sector of Iran; or
- b. Acted as a financial institution and extended \$20 Million or more in credit to another person for forty-five days or more, if that person's intent was to use the credit to provide goods or services in the energy sector in Iran.

Any Contractor who has undertaken any of the above and is identified on a list created pursuant to Section 165-a (3)(b) of the New York State Finance Law as a person engaging in investment activities in Iran, shall not be deemed a responsible Bidder pursuant to Section 103 of the New York State General Municipal Law.

Except as otherwise specifically provided herein, every Contractor submitting a bid in response to this Request for Bids must certify and affirm the following under penalties of perjury:

a. "By submission of this bid, each Bidder and each person signing on behalf of any Bidder certifies, and in the case of a joint bid, each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief, that each Bidder is not on the list created pursuant to NYS Finance Law Section 165-a (3)(b)."

Jefferson County will accept this statement electronically in accordance with the provisions of Section 103 of the General Municipal Law.

Except as otherwise specifically provided herein, any Bid that is submitted without having complied with subdivision (a) above, shall not be considered for award. In any case where the Bidder cannot make the certification as set forth in subdivision (a) above, the Bidder shall so state and shall furnish with the bid a signed statement setting forth in detail the reasons therefore. The County reserves its rights, in accordance with General Municipal Law Section 103-g to award the Bid to any Bidder who cannot make certification, on a case-by-case basis under the following circumstances.

- 1. The investment activities in Iran were made before April 12, 2012, the investment activities in Iran have not been expanded or renewed after April 12, 2012, and the Bidder has adopted, publicized and is implementing a formal plan to cease the investment activities in Iran and to refrain from engaging in any new investments in Iran; or
- 2. The County of Jefferson has made a determination that the goods or services are necessary for the County to perform its functions and that, absent such an exemption, the County of Jefferson would be unable to obtain the goods or services for which the Bid is offered. Such a determination shall be made by the County in writing and shall be a public document.

# Attachment Certification Pursuant to Section 103-g of the New York State General Municipal Law

- A. By submission of this bid, each Bidder and each person signing on behalf of any Bidder certifies, and in the case of a joint bid, each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each Bidder is not on the list created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the New York State Finance Law.
- B. A Bid shall not be considered for award, nor shall any award be made where the condition set forth in Paragraph A above has not been complied with; provided, however, that in any case the Bidder cannot make the foregoing certification set forth in Paragraph A above, the Bidder shall so state and shall furnish with the bid a signed statement which sets forth in detail the reasons therefore. Where Paragraph A above cannot be complied with, the Purchasing Unit to the political subdivision, public department, agency or official thereof to whom the bid is made, or his designee, may award a bid, on a case by case basis under the following circumstances:
  - 1. The investment activities in Iran were made before April 12, 2012, the investment activities in Iran have not been expanded or renewed after April 12, 2012, and the Bidder has adopted, publicized and is implementing a formal plan to cease the investment activities in Iran and to refrain from engaging in any new investments in Iran; or
  - 2. The political subdivision makes a determination that the goods or services are necessary for the political subdivision to perform its functions and that, absent such an exemption, the political subdivision would be unable to obtain the goods and services for which the contract is offered. Such a determination shall be made in writing and shall be a public document.

	Signature
	Title
Data	Company Name
Date	Company Name